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DEHYDRATED FLOUR MIX AND PROCESS OF MAKING THE SAME

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Our present invention relates to a dehydrated mix or flour adapted to produce edible products by adding fluid and cooking or baking as well as to the process of making the same and more specifically to such a product and process which enables us to utilize fresh eggs therein, the present invention being a continuation in part of our copending applications Serial No. 501,468, filed Dec. 10, 1930 (now Patent No. 1,931,892), Serial No. 675,646, filed June 13, 1933 (now Patent No. 1,959,466), Serial No. 675,647, filed June 13, 1933 and Serial No. 675,648, filed June 13, 1933.

In our aforesaid copending applications and patents we have pointed out the defects and disadvantages hitherto accepted of necessity by the housewife in making such products as well as certain commercial disadvantages which we have overcome, such processes and products having a more or less psychological disadvantage in that they contain dried or powdered eggs which, while entirely satisfactory in many ways, are considered by some as inferior material. The housewife and the purchasing public in general seem to prefer fresh eggs and hence the use of dried or powdered eggs is somewhat of a handicap from a psychological standpoint.

We have found, however, that we can practice the processes of our copending applications and patents and produce the products made possible thereby without the use of dried or powdered eggs and such accordingly constitutes one of the objects of our present invention.

Another object of our invention includes the use of fresh eggs in making the products by means of the processes contemplated by our copending applications and patents.

Another object is to eliminate any psychological handicap involved in the use of dried or powdered eggs by so modifying our processes and products that the use of fresh eggs is made possible.

A still further object contemplates the improvement of the emulsion formed by the shortening and molasses due to the enhanced emulsifying effect of the albumen in the eggs.

An additional object of our invention lies in producing a dry mix containing fresh eggs in which the volatiles of the eggs are entrapped in a manner analogous to the entrapment of the molasses volatiles elsewhere stated.

Other objects and advantages will be understood by those skilled in this art or will be apparent or pointed out hereinafter.

In one preferred form of our present invention we substantially follow the process set forth in our above noted application Serial No. 501,468, filed December 19, 1930 (now Patent No. 1,931,892) although, as will be hereinafter pointed out, we may also use the present invention in connection with our other copending applications. Accordingly, we place molasses and shortening in the bowl of a dough mixing machine. This bowl is provided with means for heating the same which may, for example, consist of a steam coil inserted into the bowl or a suitable jacket around the bowl through which the steam or other heating medium may be passed. The bowl is also provided with suitable stirring or agitating means. Accordingly, the molasses and shortening are subjected to heat and agitation in the bowl and if we desire we may also add salt and sugar thereto, although these latter two ingredients may be omitted at this stage and added later with the other dry ingredients as will be understood from our copending applications. To such molasses and shortening, with or without the salt and sugar, we add fresh eggs either at the same time the shortening and molasses are put into the bowl or during the heating and agitation thereof. The albumen of the eggs aids in the emulsification and produces a better, more complete and more stable emulsion. At the same time the values in the eggs are fully utilized and there is no prior fixation or other conversion of the albumen or other egg constituents so as to represent an incomplete utilization of such eggs. The amount of fresh eggs added is such an amount as constitutes from about 5% to about 20% of the weight of the wet dough which is eventually formed after the flour has been added. A preferred amount of fresh eggs in the case of gingerbread is about 5% of the weight of the wet dough.

After the fresh eggs have been added and exerted their action on the shortening and molasses we then gradually add flour to the emulsion until a dough is formed in accordance with our aforesaid Patents 1,931,892 and 1,959,466 and our other applications. The dough formed is what we have termed a wet dough and considering the weight of the wet dough the fresh eggs constitute 5 to 20% thereof as above explained. The dough is, of course, suitably kneaded or the like and is then ready for drying.

We may dry the dough in a variety of ways. We may, for example, roll the dough into a relatively thin sheet which is dried by subjecting it to the influence of a blast of warm air, or we may divided the dough mechanically into relatively small pieces which may be placed on trays or dried in a suitably heated drying cabinet. We